IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

LIONRA TECHNOLOGIES LIMITED v. FORTINET, INC.	CASE NO. 2:22-cv-00322-JRG-RSP (Lead Case)
LIONRA TECHNOLOGIES LIMITED v. CISCO SYSTEMS, INC.	CASE NO. 2:22-cv-00305-JRG-RSP (Member Case)
LIONRA TECHNOLOGIES LIMITED v. HEWLETT PACKARD ENTERPRISE COMPANY, et al	CASE NO. 2:22-cv-00319-JRG-RSP (Member Case)
LIONRA TECHNOLOGIES LIMITED v. PALO ALTO NETWORKS, INC.	CASE NO. 2:22-cv-00334-JRG-RSP (Member Case)

CISCO SYSTEMS, INC.'S REPLY TO ITS RULE 12(b)(6) MOTION TO DISMISS FOR
INELIGIBILITY OF U.S. PATENT NO. 7,916,630 UNDER 35 U.S.C. § 101

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None of Lionra's arguments can change the dispositive reality that the claims of the '630 Patent are directed to an abstract idea: monitoring a system by having each component monitor only one neighboring component. There is no inventive concept in the claims beyond the implementation of this abstract idea, and thus the claims are ineligible.

A.   *Alice* Step One: The Claims Are Directed to an Abstract Idea

There is no dispute that the challenged claims of the '630 Patent are directed to monitoring a system of components by having each component monitor only one neighboring component. Mot. at 1; Resp. at 9–10. Lionra instead contends that the implementation of this abstract idea in network systems renders it eligible because it makes a network more efficient. Dkt No. 49 ("Resp.") at 1. But even if the claimed invention improves efficiency by solving the alleged problems of "high message volume" and "redundant central coordination," it does so merely by implementing the abstract idea with generic technical components, rendering it patent ineligible. *See, e.g.*, *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1364 (Fed. Cir. 2020) ("[C]laiming the improved speed or efficiency inherent with applying [an] abstract idea on a computer' [is] insufficient to render the claims patent eligible.").

 Lionra relies on the "logical ring structure," as well as the "Inform All" method, and "Acknowledgement" messages elements to contend that the claims are "not directed to conventional networks and do not merely implement an abstract idea on conventional networks." Resp. at 10.   But these elements cannot impart eligibility because they were concededly known in the art and are directed to abstract concepts themselves. *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 771 (Fed. Cir. 2019) ("Adding one abstract idea . . . to another abstract idea . . . does not render the claim non-abstract").

Lionra next contends that the claims are patent-eligible because they "correspond to a real-world and tangible communications system (i.e., HiPath IP)." Resp. at 5. But the implementation

of an abstract idea, even if connected to a real-world system does not confer patent eligibility. *See*

In re TLI Commc'ns LLC Patent Litigation, 823 F.3d 607, 611 (Fed. Cir. 2016).

Finally, Lionra contends that Cisco's analogy to the buddy system is not perfect, because in Lionra's view buddies must be paired up rather than assigned in a ring, and must report missing students only to the teacher rather than to the class as a whole. *Id.*   But even if there are minor differences in the implementation of the same abstract idea in the claims and the analogy, the distinctions are still themselves no more than known, abstract concepts implemented using conventional components that cannot confer patent eligibility.

1.   *Lionra's cited cases are inapposite*

Lionra contends that the claims of '630 Patent are most analogous to those in *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303 (Fed. Cir. 2020). Resp. at 1–2. The *Uniloc* claims, however, were held patent-eligible because they recited a specific technological improvement that "*change[d] the normal operation* of [a] communication system itself." *Id.* at 1308. (emphasis added). Here, in contrast, there is no analogous change.

Instead, the claims of the '630 Patent are most analogous to the ineligible claims in *Coho Licensing* and *Appistry*, which were directed to the implementation of the abstract concept of "divide and conquer" to achieve network efficiency. For example, in *Coho Licensing LLC v. Glam Media, Inc.*, the court held that "the patents-in-suit recite the abstract idea of distributed processing—merely splitting up a job into smaller pieces to be completed by multiple participating computers in the hierarchy." 2017 WL 6210882, at *5 (N.D. Cal. Jan. 23, 2017). Furthermore, in *Appistry, Inc. v. Amazon.com, Inc.*, the court reasoned that "using a network of multiple actors to efficiently and reliably process information and/or complete a task by breaking down the job into small pieces, each handled by a different actor organized within an internal hierarchy" is not a patent-eligible idea. 2015 WL 4210890, at *2 (W.D. Wash. July 9, 2015). Similarly, the claims

of the '630 Patent divide the task of monitoring system components by having each component monitor only one other component. This quintessential divide-and-conquer approach is entirely abstract, and has long been employed outside the context of computers (*e.g.*, monitoring schoolchildren). Mot. at 7–8.

2.   *The limitations on which Lionra relies for patent eligibility represent known technology and/or are abstract concepts themselves*

As Cisco discussed in its opening brief, a "logical ring structure" was "known from the related art." Mot. at 2 (citing '630 patent, 6:5–6). In fact, Lionra admits that the patentee admitted that the logical ring structure was known. *See* Resp. at 9 (citing Dkt. No. 49- 2, Apr. 26, 2010 Applicant Remarks at 7) (admitting that the prior art disclosed systems in which components monitored both of its neighbors in the logical ring and distinguishing the claims of the '630 Patent by appealing to the fact that the claims cover monitoring only a single neighbor).

Furthermore, a "logical ring structure" merely represents assigning components an order that is not necessarily connected to a physical order. *See* Mot. at 4, 9; '630 Patent at 2:40–45. More specifically, for a component to monitor its "neighbor," there must be some order in the system by which the term "neighbor" is given meaning. Assigning an order to components is "not even arguably inventive" by itself or in combination with any other claimed elements. *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014).

The same is true for the other elements identified by Lionra. More specifically, and for the same reasons, the "Inform All" method and "Acknowledgement" messages were known elements that merely recite steps performed by generic components using functional language directed to carrying out the abstract idea of monitoring a system by having each component monitor only one of its neighbors. The same is also true for the rest of elements of the independent and dependent

claims, which similarly cover known, insignificant, extra-solution activity, which cannot transform the claims in to patent-eligible subject matter.

Lionra also contends that these limitations show that the claims cannot be analogized to the abstract "buddy system," and therefore confer patent-eligibility. Resp. at 10. More specifically, Lionra contends that the analogy is not appropriate because the buddy system requires "as a rule" that the students only notify the teacher, and that there can only be reciprocal monitoring: again relying on the "logical ring structure" and "Inform All" elements. Resp. at 10. As explained above, even if these distinguish the claims from the analogy, they are still themselves no more than known, abstract concepts that cannot confer patent eligibility. Further, even if a ring structure and inform-all message were concepts specific to computer networks, they still would not impart eligibility. *Appistry*, 2015 WL 4210890, at *2 ("[T]hat the inventions describe this idea as implemented by computers or as existing solely in the computing realm […] highlights the fact that the patents claim an abstract idea implemented in a particular technological environment.").

Accordingly, at the heart of the claims of the '630 Patent is the abstract idea of having each component monitor only a single neighboring component, and the only possible advances that Lionra can identify are known, abstract concepts themselves.

B.   *Alice* Step Two: The Claims Lack an Inventive Concept

At *Alice* Step Two, Lionra contends that the claims of the '630 Patent claim inventive combinations. Resp. at 14. Yet, Lionra does not identify what combinations it alleges are inventive or unconventional. At best, Lionra argues that the claims involve a "combination of limitations directed to a method by which component is monitored without requiring a central coordinator." *Id.* But this merely points to the same abstract idea of having each component monitor only one other component, and Lionra identifies no specific technological improvement required by the claims to implement this abstract idea. *BSG Tech LLC v. Buyseasons, Inc.*, 899

F.3d 1281, 1291 (Fed. Cir. 2018) ("It has been clear since *Alice* that a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept.").

As discussed above, the claims cover ordering components, assigning each component a single neighbor to monitor, and instructing each component to inform the other components if there is an issue with the component being monitored. '630 Patent at 6:25–38. This "ordered combination" simply instructs the practitioner to implement the abstract idea—monitoring a system by having each component monitor one and only one neighboring component—via routine, conventional activity using generic computer technology. There is simply nothing in any limitation of claim considered individually or as an ordered combination that transforms the abstract idea of monitoring one and only one neighboring component into a patent-eligible idea.

C.   Amendment Would be Futile

Amendment is futile "when the justification for the denial is 'readily apparent'" and the "record reflects ample and obvious grounds for denying leave to amend." *Marucci Sports, L.L.C. v. Nat'l Collegiate Athletic Ass'n*, 751 F.3d 368, 378 (5th Cir. 2014). Here, the claims, specification, and patentee's own admissions during prosecution confirm that any possible benefit from the claims result from no more than the implementation of an abstract idea using known technology. Thus, any amendment would be futile because it would contradict the intrinsic record. *See, e.g.*, *Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 912 (Fed. Cir. 2017); *see also Simio, LLC v. FlexSim Software Prod., Inc.*, 983 F.3d 1353, 1365 (Fed. Cir. 2020) (affirming the district court's denial of leave to amend, holding that allegations regarding increased efficiency – almost identical to those asserted by Lionra – are conclusory and insufficient as a matter of law).

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CERTIFICATE OF SERVICE

I hereby certify that on December 1, 2022, the foregoing was electronically filed in compliance with Local Rule CV-5(a) and served via the Court's electronic filing system on all counsel who have consented to electronic service.

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/s/ Brian Rosenthal

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